January 23, 2004 Case No. NL 000676 (7790/313)

Serial No.: 09/995,457 Filed: November 27, 2001

Page 3 of 12

## **CLAIM AMENDMENTS**

Claims 1-13 are currently pending in the application.

Please amend claims 1-13 as shown below.

Please add new claims 14-16 as shown below.

This listing of claims 1-16 will replace all prior versions, and listings, of claims in the application:

 (Currently Amended) A hydrogen storage material, comprising: hydrogen; and

a magnesium-containing intermetallic compound capable of forming a hydride with the hydrogen at room temperature, characterized in that wherein the intermetallic compound comprises includes an alloy of magnesium and a trivalent metal selected from the a group consisting of Sc, Y, La, and the actinide series of rare earth elements.

- 2. (Currently Amended) A <u>The hydrogen storage material as claimed in of claim</u>
  1, characterized in that the intermetallic compound comprises an wherein the alloy is selected from a group consisting of scandium-magnesium, gadolinium-magnesium, and yttrium-magnesium.
- 3. (Currently Amended) A <u>The hydrogen storage material as claimed in of claim</u>
  1, characterized in that the <u>wherein</u> the intermetallic compound comprises <u>includes</u> a scandium-magnesium alloy.
- 4. (Currently Amended) A <u>The hydrogen storage material as claimed in of claim</u> 3, characterized in that the scandium-magnesium alloy comprises includes 1-50 at % scandium and 50-99 at. % magnesium.
- 5. (Currently Amended) A <u>The hydrogen storage material as claimed in of claim</u> 3, characterized in that the scandium-magnesium alloy comprises <u>includes</u> 15-40 at % scandium and 60-85 at. % magnesium.

January 23, 2004 Case No. NL 000676 (7790/313) Serial No.: 09/995,457 Filed: November 27, 2001

Page 4 of 12

- 6. (Currently Amended) A <u>The hydrogen storage material as claimed in of claim</u> 3, characterized in that the scandium-magnesium alloy comprises includes 30-40 at % scandium and 60-70 at. % magnesium.
- 7. (Currently Amended) A <u>The hydrogen storage material as elaimed in of claim</u> 3, characterized in that the scandium-magnesium alloy comprises includes  $Sc_{0.35}Mg_{0.65}H_X$ .
- 8. (Currently Amended) A <u>The hydrogen storage material as claimed in of</u> claim 1, characterized in that <u>further comprising:</u>

  an amount of a catalytically active material.
- 9. (Currently Amended) A <u>The</u> hydrogen storage material as claimed in of claim 8, eharacterized in that

wherein the catalytically active material comprises includes at least one metal selected from the a group consisting of palladium, platinum, cobalt, nickel, rhodium, or iridium, and/or a composition of the formula DE3[,];

wherein D is at least one element selected from the a group consisting of Cr, Mo and W[,]; and

wherein E is at least one element selected from the a group consisting of Ni and Co.

- 10. (Currently Amended) A <u>The hydrogen storage material as claimed in of</u> claim 8, characterized in that wherein the catalytically active material comprises includes one of palladium, platinum or rhodium.
- 11. (Currently Amended) An electrochemically active material, characterized in that the material comprises a hydrogen storage material as claimed in claim 1 comprising:

hydrogen; and

January 23, 2004 Case No. NL 000676 (7790/313)

Serial No.: 09/995,457 Filed: November 27, 2001

Page 5 of 12

a magnesium-containing intermetallic compound capable of forming a hydride with the hydrogen, wherein the intermetallic compound includes an alloy of magnesium and a trivalent metal selected from a group consisting of Sc, Y, and the actinide series of rare earth elements.

12. (Currently Amended) An electrochemical cell, at least comprising: a positive electrode; and

a negative electrode <u>operatively paired with said positive electrode</u>, <del>characterized in that the negative electrode comprises a hydrogen storage material as</del> <del>claimed in claim 1</del> <u>said negative electrode including</u>

hydrogen, and

a magnesium-containing intermetallic compound capable of forming a hydride with the hydrogen at room temperature, wherein the intermetallic compound includes an alloy of magnesium and a trivalent metal selected from a group consisting of Sc, Y, and the actinide series of rare earth elements.

13. (Currently Amended) An Electronic electronic equipment powered by at least one electrochemical cell, characterized in that the at least one electrochemical cell is an electrochemical cell as claimed in claim 12 each electrochemical cell comprising:

a positive electrode; and

a negative electrode operatively paired with said positive electrode, said negative electrode including

hydrogen, and

a magnesium-containing intermetallic compound capable of forming a hydride with the hydrogen at room temperature, wherein the intermetallic compound includes an alloy of magnesium and a trivalent metal selected from a group consisting of Sc, Y, and the actinide series of rare earth elements.

14. (New) The electrochemically active material of claim 11, further comprising: an amount of a catalytically active material.

January 23, 2004 Case No. NL 000676 (7790/313) Serial No.: 09/995,457 Filed: November 27, 2001 Page 6 of 12

- 15. (New) The electrochemical cell of claim 12, further comprising: an amount of a catalytically active material.
- 16. (New) The electronic equipment of claim 13, wherein each electrochemical cell further comprises an amount of a catalytically active material.